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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,280	07/23/2003	Kevin F. Corcoran	CRNT-0141-US	7901
64713 7590 05/23/2008 CAPITAL LEGAL GROUP, LLC 1100 River Bay Road Annapolis, MD 21409				
EXAMINER				
QURESHI, AFSAR M				
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/625,280

**Applicant(s)**

CORCORAN, KEVIN F.

**Examiner**

AFSAR M. QURESHI

**Art Unit**

2616

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26, 28-35 and 49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26, 28-35 and 49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. This Office Action is responsive to Amendments/Arguments/Remarks received on 3/13/2008.

Amended claims are made of record and claim 27 is cancelled as requested.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-35 and 49 have been considered but are moot in view of the new ground(s) of rejection.

Applicant, in general, argued that the hand held device of Starr (US 2003/0021388) is directed to test the transmission line and not the VoIP network, as claimed, the modem of Zalitzky (2004/0037317) is not a test device. Applicant further argued that the controller of Starr is not equivalent to MAC as claimed (page 10).

In light of amendments to the claims Examiner found a new prior art to address the above arguments.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-26, 28-35 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starr et al. (US 2003/0021388) in view of Houh (US 2002/0015387)

As to claims 1, 11, 18, 28 and 49, Starr et al. ("Starr") disclose a hand held (portable) test device connected by way of a transmission line 14 to a network interface device 16 at the customer premises user interface 100 ; a memory 32 storing testing sequence and logic ([0023], lines 3-4, figures 2 and 3). The testing process includes loudness scaling and noise power, transmitting test tones, analyzing response and delay and distortion ([0023]) (claims 29-35). Further, Starr discloses a communication interface port comprising a telephone wall jack i.e., RJ 11 ([0015], [0035]) (claims 8, 13-15).

Starr fails to disclose: that the test device is a VoIP test device (claim 1-35 and 36); that the compression protocols used, in coding and encoding, by digital signal processor 36 (claims 6, 18); that transceiver is an Ethernet transceiver (claims 6, 16), comprising audio input and audio output (claim 8); a dual tone multi-frequency encoder (claim 12); that test device including a hand set and a base (claim 22).

However, Houh, discloses a test system utilizing a network processor for testing VoIP networks (see figure 3 and [0045]), comprising a user interface

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([0056]), a memory storing a test algorithm ([0083]), a vocoder (codec) (see [0039]), a processor (fig. 1) in communication with variety of interfaces, transceiver, codec, MAC Address, MAC Ethernet, memory executing software to communicate with VoIP network to test (see [0029], [0045], [0047], [0070]). As to claims 28 and 49, Houh discloses processing response signal from test unit 180 to gateways 130 and 150 in which the network processor, under program control, determines the network behavior including at least one and or more than one of packet delay, jitter, packet loss, latency etc (claim 11).

As to claims 2 and 3, the gateway 130 is equipped with processors having program code signal carried thereon as digital signal (see [0039], [0046]).

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention, to be able modify the test device by Starr, utilizing the software and processor of Houh for processing voice signals in a VOIP environment in order to save more bandwidth.

As to claims 4-7, 9, 10, 12, 16, 17, 22, Starr discloses the ADSL modem can also be considered as power line modem and as cable modem (see [0035]). Starr further discloses that the testing procedure can be initiated by dial-up voice band modem connection (see [0031]), and can be considered as manual voice input device, Starr also discloses that the results are transmitted to computer 18 screen for display (claim 10).

Starr does not disclose an Ethernet transceiver, and a dual tone multi-frequency encoder (claim 12). Houh discloses that gateway 130 can be equipped with encoding/decoding, dual mode voice activity devices, etc (see [0039]) as

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standard interfaces and performing compression/decompression protocols known in the art (claim 4). Houh also discloses MAC Ethernet transceiver as part of transceiver and a user interface device can be comprised of an audio input/output devices (see [0037] [0080]).

As to claims 8, 13-15, Starr discloses an interface 46. The interface 46 transmits signals to and receives signals from the network device 16 along transmission line 14 via communication interface device 16 with tip and ring (see fig. 3) wherein communication interface port comprises a telephone wall jack, i.e., RJ 11 (see [0015], [0035])

As to claims 19-21, 23-26 and 35, Starr does not specifically disclose having a network status indicator providing mean opinion score output and to test the VoIP network based on PSQM etc. However, Houh discloses a telephone handset and base and vocoder (gateway) optionally transmitting a code indicator. Houh further discloses testing the VoIP network based on PSQM (see [0054]). Further to claims 24-26, Houh discloses, as discussed in the rejection of claim 1 above, a computer usable medium including a readable memory. It will be obvious to one skilled in the art, that this memory is capable of storing IP/ MAC addresses, and an algorithm/software configured to request an IP address stored within, or to initiate further lookup tables and collect results from, as indicated by Houh (see [0029]).

As to claims 29-34, Starr discloses signal distortion based on the predicted signal power (see [0028]). However, Starr fails to specifically disclose a VoIP network operable to communicate voice data according to predetermined

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voice communication and indicating signal echo or call drop out. Houh discloses masking IP addresses ([0074]) (claim 29), communicating voice data (as discussed in the rejection of claim 1 above) and determining each of or at least two of packet jitter, packet loss or latency of VoIP network (see [0013], [0039] and [0047]).

Therefore it would have been obvious to one of ordinary skill in the art, at the time of invention, to be able to modify the portable device of Starr by utilizing the programmable processor and the test system of Houh in order to process packets, analyze packet, simulating network conditions, providing sniffing functionality with packet to flow correlation on high bandwidth interfaces within a VoIP network thereby establishing a reliable communication channel over the data link.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFSAR M. QURESHI whose telephone number is (571)272-3178. The examiner can normally be reached between 8 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Field Lynn can be reached on (571) 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Afsar M Qureshi/  
Primary Examiner  
Art Unit 2616

5/19/2008